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REMARKS

Claims 1-2 have been amended. Claims 3-20 have been added. Claims 1-20 are pending in the case. Further examination and reconsideration of pending claims 1-20 are hereby respectfully requested.

Defective Oath or Declaration

The Office Action states that "[t]he oath or declaration is defective because: It does not state that the person making the eath or declaration believes the named inventor or inventors to be the original and first inventor or inventors of the subject matter which is claimed and for which a patent is sought." (Office Action - page 2.) Applicants respectfully traverse this assertion.

For instance, the declaration that was filed in the present case states that "[w]e believe that we are the original joint inventors of the subject matter which is described and claimed in United States Application No. 09/639,818, filed August 17, 2000, for the invention entitled MICROPARTICLES WITH MULTIPLE FLUORESCENT SIGNALS AND METHODS OF USING SAME." (Declaration, page 1.) Therefore, the declaration states that the persons making the declaration believe the named inventors are the original inventors of the subject matter which is claimed and for which a patent is sought.

The present case is a continuation of United States Application No. 09/639,818, and the declaration filed in the present case is a copy of the declaration that was filed in the prior non-provisional application. A continuation or divisional application filed under 37 CFR 1.53(b) (other than a continuation-in-part (CIP)) may be filed with a copy of the eath or declaration from the prior nonprovisional application. See 37 CFR 1.63(d)(1)(iv). MPEP 602.05(a). A copy of an oath or declaration from a prior application may be submitted with a continuation or divisional application even if the oath or declaration identifies the application number of the prior application. MPEP 602.05(b).

For at least the reasons set forth above, Applicants believe that the declaration is not defective. Accordingly, Applicants respectfully request removal of the requirement for a new oath of declaration.

Section 112, second paragraph, Rejections

Claims 1-2 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-2 have been amended for clarification. It is believed that the amendments to these claims address the antecedent basis problems identified in the Office Action. Accordingly, removal of this rejection is respectfully requested.

Double Patenting Rejections

Claims 1-2 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14 and 16 of U.S. Patent No. 6,649,414 to Chandler et al. Claim 2 was also rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 15 of U.S. Patent No. 6,268,222 to Chandler et al. Applicant respectfully traverses these rejections. However, to expedite prosecution, a Terminal Disclaimer is submitted in separate paper to obviate the double patenting rejections in accordance with 37 C.F.R. § 1.321(c). The Terminal Disclaimer is believed sufficient to overcome any assertion of judicially created obviousness-type double patenting between the present claims and claims of U.S. Patent No. 6,649,414 to Chandler et al. and 6,268,222 to Chandler et al. Accordingly, removal of these rejections are respectfully requested.

Section 102 Rejections

Claim 2 was rejected under 35 U.S.C. § 102(b) as being anticipated by PCT Publication No. WO 97/14028 to Chandler et al. (hereinafter "Chandler"). As will be set forth in more detail below, the § 102 rejection of claim 2 is respectfully traversed.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. V. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987), MPEP § 2131. The cited art does not disclose all limitations of the currently pending claims, some distinctive limitations of which are set forth in more detail below.

The cited art does not teach providing a population of microparticles which includes subpopulations of microparticles, each microparticle of which includes a plurality of nanoparticles coupled to a polymeric microparticle. Amended independent claim 2 recites in part: "providing a population of microparticles which includes subpopulations of microparticles, wherein each of the microparticles of the population comprises a polymeric microparticle and a plurality of nanoparticles coupled to the polymeric microparticle." Support for the amendments to claim 2 can be found in the Specification, for example, in paragraph 0013.

Chandler discloses multiplexed analysis of clinical specimens apparatus and methods. Chandler, however, does not disclose providing a population of microparticles which includes subpopulations of microparticles, each microparticle of which includes a plurality of nanoparticles coupled to a polymeric microparticle. For example, Chandler states:

... the beads within each subset are uniform with respect to at least three and preferably four known classification parameter values measured with a flow cytometer: e.g., forward light scatter (C_1) which generally correlates with size and refractive index; side light scatter (C_2) which generally correlates with size; and florescent emission in at least one wavelength (C_2) , and preferably in two wavelengths $(C_1$ and $C_4)$, which generally results from the presence of fluorochrone(s) in or on the beads. (Chandler -- page 7, lines 5-10.)

Chandler, however, does not disclose that each of the beads include a plurality of nanoparticles coupled to a polymeric microparticle. As such, Chandler does not teach providing a population of microparticles which includes subpopulations of microparticles, each microparticle of which includes a plurality of nanoparticles coupled to a polymeric microparticle, as recited in claim 2. Consequently, Chandler does not teach all limitations of claim 2.

For at least the aforementioned reasons, claim 2 is not anticipated by the cited art. Accordingly, removal of this rejection is respectfully requested.

Section 103(a) Rejections

Claim 1 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Chandler. As will be set forth in more detail below, the §103(a) rejection of claim 1 is respectfully traversed.

To establish prima facie obviousness of a claimed invention, all claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974), MPEP 2143.03. Obviousness cannot be established by combining or modifying the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion or incentive to do so. In re Bond, 910 F. 2d 81, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990). The cited art does not teach or suggest all limitations of the currently pending claims, some distinctive limitations of which are set forth in more detail below.

The cited art does not teach or suggest providing a population of microparticles which includes distinct subpopulations of microparticles, each microparticle of which includes a plurality of nanoparticles coupled to a polymeric microparticle. Amended independent claim 1 recites in part: "providing a population of microparticles which includes distinct subpopulations of microparticles, wherein each of the microparticles of the population comprises a polymeric microparticle and a plurality of nanoparticles coupled to the polymeric microparticle." Support for the amendments to claim 1 can be found in the Specification, for example, in paragraph 0013.

For at least the reasons set forth above, Chandler does not teach providing a population of microparticles which includes distinct subpopulations of microparticles, each microparticle of which includes a plurality of nanoparticles coupled to a polymeric microparticle. In addition, Chandler does not suggest providing such a population of microparticles. As such, Chandler does not teach or suggest providing a population of microparticles which includes distinct subpopulations of microparticles, each microparticle of which includes a plurality of nanoparticles coupled to a polymeric microparticle, as recited in claim 1. Consequently, Chandler does not teach or suggest all limitations of claim 1.

For at least the reasons stated above, claim 1 is patentably distinct over the cited art. Accordingly, removal of this rejection is respectfully requested.

Patentability of the Added Claims

The present amendment adds claims 3-20. Claims 3-11 depend from claim 1; claims 12-20 depend from claim 2. As such, claims 3-20 are patentably distinct over the cited art for at least the reasons set forth above. Accordingly, allowance of claims 3-20 is respectfully requested.

CONCLUSION

This response constitutes a complete response to all issues raised in the Office Action mailed September 8, 2004. In addition, the art cited but not relied upon is not believed to be pertinent to the patentability of the present claims. In view of the remarks traversing rejections presented therein, Applicants assert that pending claims 1-20 are in condition for allowance. If the Examiner has any questions, comments, or suggestions, the undersigned carnestly requests a telephone conference.

The Commissioner is authorized to charge any fees which may be required, or credit any overpayment, to deposit account number 50-3268/5868-03004.

Respectfully submitted,

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